



(FORM 2-B)

#### Four Degree Engine Timing Retard

Applicants who wish to comply with the engine control technology requirements by employing four-degree timing retard must fill out this form and have it signed by a mechanic who verifies that the engine's timing has been retarded.

For some specific engines four-degree engine timing retard is not appropriate because it could cause significant engine damage. If the engine is unable to comply with the emission concentration and control technology requirements of the regulation and four degree retard is not appropriate, a certified statement from the engine manufacturer is required. The statement shall provide evidence that four degree engine timing retard may cause serious engine damage or a cost effectiveness study showing that four degree retard is inappropriate.

1. *Company Name* - Legal name of entity, business, organization, agency or private individual that operates engine.
2. *Mailing Address* - Address where all business correspondence is to be mailed.
3. *Engine Manufacturer* - for example: Caterpillar, Detroit Diesel, etc.
4. *Model* - will likely be a series of numbers or letters or combinations of numbers and letters, for example: DD350.
5. *Series* - will likely be an extension of the Model number such as AT.
6. *Manufacturer's Maximum Horsepower Rating (Bhp)* - the maximum brake horsepower rating on the nameplate of the engine.
7. *Year of Manufacture* - Year engine was built, not model year or year sold. If the year of manufacture is unknown provide an estimate.
8. *Serial Number* - A unique, unit specific number, usually on the engine nameplate.  
For example: DD3501LKR011168.
9. *Manufacturer's Standard Timing* - The timing in degrees from top dead center that the manufacturer has set the engine to off the assembly line.
10. *Actual Timing Before Retard* - The timing in degrees from top dead center that the engine was set at before the mechanic retarded the timing. Will likely be the same setting as #10 above.
11. *Timing After Retardation* - The timing in degrees from top dead center that the engine was retarded to after the mechanic retarded the timing.
12. *Confirmation of Retardation Method* - Explain how the engine's retardation can be verified by an inspector. Visual, how can inspector observe retard. Internal, cannot be confirmed without engine teardown. Other, indicate how inspector can confirm retard.
13. *Indication of Retardation Procedure* - Indicate whose specification or procedure that was followed to retard the engine. Manufacturer's procedure, identify the procedure number. Custom procedures, attach a full explanation of the procedure. Other, procedures must be described in full detail.
14. *Mechanic's Name and Phone Number* - The mechanics printed name and phone number.
15. *Employer or Business Name* - The business name or entity employing the mechanic.
16. *Mailing Address* - address of mechanic's business or employing entity.
17. *Signature of Mechanic and Date* - Mechanic must sign and date the form.
18. *Printed Name of Responsible Party* - Printed or typed name and official title of person signing and dating form.
19. *Signature of Owner/Operator and Date* - Responsible person (Owner/Operator) must sign and date form.

Revised 12/1999